



# भारतीय राष्ट्रीय राजमार्ग प्राधिकरण (सड़क परिवहन और राजमार्ग मंत्रालय, भारत सरकार)) National Highways Authority of India (Ministry of Road Transport & Highways, Govt of India)

क्षेत्रीय कार्यालय, ओडिशा / Regional Office, Odisha  
301 - ए, तीसरी मंजिल, पाल हाईट्स, प्लॉट नं जे/7, जयदेव विहार, भुवनेश्वर - 751013, ओडिशा  
301-A, 3rd Floor, Pal Heights, Plot No : J/7, Jayadev Vihar, Bhubaneswar- 751013, Odisha  
दूरभाष / Ph.: 0674 - 2361470/ 570/670 (का/ओ)  
ई-मेल/e-mail : roodisha@nhai.org, ronhaioodisha@gmail.com, वेबसाइट/Web : www.nhai.gov.in



NHAI/13011/54/RO/OD/2786/2023

09.11.2023

To

The Sr. Technical Director,  
NIC Centre at MoRTH,  
Transport Bhawan,  
New Delhi 110001

**Sub:** Six laning of Chandikhole- Jagatpur- Bhubaneswar section of NH-5 from Km.414+000 to Km.419+000 and Km.0+000 to Km.62+000 in the State of Odisha- **Permission for laying of 132 kV underground power cable crossing the NH-16 at CRPF square as part of UG cabling work from proposed 132/33 KV GIS Sub- Station, Nayapalli to 132/33 kV GIS Sub- Station, Unit- VIII- Reg**

**Ref:** PD, PIU- Bhubaneswar letter No. 1370 dated 18.09.2023

Sir,

Please find enclosed herewith a proposal of DGM (Elect), OPTCL, Bhubaneswar for laying of underground power cables crossing the NH-16 at CRPF square as part of UG cabling work from proposed 132/33 KV GIS Sub- Station, Nayapalli to 132/33 kV GIS Sub Station, Unit- VIII. The details are as under:

Sl No.	Description	Chainage	Dia of cable (mm)	Dia of Duct pipe (mm)	Remark
1.	Crossing-1 (132/33 kV UG Cable)	Km.415+730	160	457.2	Crossing of 3 nos. of 132/33 KV UG cable (160mm each) along with 40mm dia OFC through 457.2 mm duct by HDD method. (Near CRPF Squire)

2. Accordingly, as per guidelines issued by MoRTH vide F. No. RW/NH-33044/29/2015/S&R(R) dt. 22.11.2016, the application along with the recommendations of concerned PD/Consultants are enclosed herewith with request to hoist the same in the Ministry's Website for public comments within 30 days of uploading on the website.

This is issued with the approval of the "Regional Officer, NHAI, Regional Office, Odisha, Bhubaneswar.

Yours faithfully,

(Sunil Kumar)  
General Manager (Tech)



सत्यमेव जयते

# भारतीय राष्ट्रीय राजमार्ग प्राधिकरण

(सड़क परिवहन और राजमार्ग मंत्रालय, भारत सरकार)

## National Highways Authority of India

(Ministry of Road Transport & Highways, Govt of India)

क्षेत्रीय कार्यालय, ओडिशा / Regional Office, Odisha

301 - ए, तीसरी मंजिल, पाल हाइट्स, प्लॉट नं जे/ 7, जयदेव विहार, भुवनेश्वर - 751013, ओडिशा

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NHAI/13011/54/RO/OD/2875/2023

09.11.2023

### INVITATION OF PUBLIC COMMENTS

**Sub:** Six laning of Chandikhole- Jagatpur- Bhubaneswar section of NH-5 from Km.414+000 to Km.419+000 and Km.0+000 to Km.62+000 in the State of Odisha- Permission for laying of 132 kV underground power cable crossing the NH-16 at CRPF square as part of UG cabling work from proposed 132/33 KV GIS Sub- Station, Nayapalli to 132/33 KV GIS Sub- Station, Unit- VIII- Reg

DGM (Elect), OPTCL, Bhubaneswar has submitted a proposal for laying of underground power cables crossing the NH-16 at CRPF square as part of UG cabling work from proposed 132/33 KV GIS Sub- Station, Nayapalli to 132/33 KV GIS Sub- Station, Unit- VIII. The details are as under:

Sl No.	Description	Chainage	Dia of cable (mm)	Dia of Duct pipe (mm)	Remark
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2. As per guidelines issued by MoRT&H vide F. No. RW/NH-33044/29/2015/S&R(R) dated 22.11.2016, the Highway Administration will put out the application in the public domain for 30 days for seeking claims and objections on grounds of public inconvenience, safety and general public interest.

3. In view of the above, the comments of public, if any, on the above mentioned proposal are invited on below mentioned address:

The Regional Officer,  
National Highways Authority of India,  
Regional Office, Odisha  
301-A, 3rd Floor, Pal Heights,  
J/7, Jayadev Vihar, Bhubaneswar 751013, Odisha  
e-mail : [roodisha@nhai.org](mailto:roodisha@nhai.org)


This is issued with the approval of the "Regional Officer, NHAI, Regional Office, Odisha, Bhubaneswar".

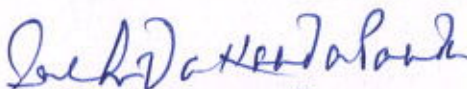
General Manager (Tech)  
National Highways Authority of India,  
Regional Office, Odisha  
301-A, 3rd Floor, Pal Heights,  
J/7, Jayadev Vihar, Bhubaneswar 751013




**Proposal for laying of underground power cables from proposed 132/33  
KV Nayapali to Unit-VIII**

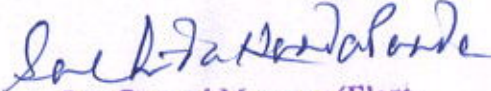
Sl No.	Items	Information/Status	Remarks
1	General Information for Laying of Underground Cable - 630 Sqmm HDD Cable laying from km 415 to 628 and crossing at CRP Flyover(Jyoti Medical to Police Outpost)		
1.1	Name and address of the applicant/agency	Dy. General Manager (EHT) Construction Division, Odisha Power Transmission Corporation Limited, Bhubaneswar, Odisha	
1.2	National Highway Number	NH -16	
1.3	State	Odisha	
1.4	Location	CRP Flyover(Jyoti Medical to Police Outpost Chanage-415 to 628	
1.5	(Chainage in Km.)	90.00 Mtr (LHS)	
1.6	Length in Km	0.90 KM	
1.7	Width of available Row	90 MTR	
	(a) Left side from centre line towards increasing chainage/Km. direction	45 mtr	
	(b) Right side from centre line towards increasing chainage/Km. direction	45 mtr	
1.8	Proposal to lay Underground cable	Power Supply	
	(a) Left side from centre line towards increasing chainage/Km. direction		
	(b) Right side from centre line towards increasing chainage/Km. direction		
1.9	Proposal to acquire land	NA	
	(a) Left side from centre line.		
	(b) Right side from centre line		
1.10	Whether proposal is in the same side where land is not to be acquired	NA	
	If not then where to lay the cable	Within ROW	
1.11	Details of already laid services, if any, along the proposed route	NA	
1.12	Number of lanes (2/4/6/8 Lanes) existing	6 lane with both side S/R	
1.13	Proposed number of Lanes (2 lane with paved shoulders/4/6/8 lanes)	NA	

  
 Team Leader  
 MSV International Infrastructure Association with  
 HighBrid Infra India Private Pvt. Ltd.

  
 Dy. General Manager (Elect.  
 E. H. T. (C) Division  
 OPCTL, Bhubaneswar

Sl No.	Items	Information/Status	Remarks
1.14	Service road existing or not	Service road existing	
	If yes then which side	BOTH LHS & RHS	
	(a) Left side from centre line.	15.0 MTR	
	(b) Right side from centre line	15.0 MTR	
1.15	Proposed service road	Yes	
	(a) Left side from centre line.		
	(b) Right side from centre line	Yes	
1.16	Whether proposal to lay electricity underground cable line is after the service road or between the service road and main carriageway	Service road and out side of service road	
1.17	The permission for laying of underground cable shall be considered for approval/rejection based on the Ministry Circulars mentioned as above.	NA	
(a)	Carrying of sewage/gas pipeline on High way bridges shall not permitted as funes/gases pipes can accelerate the process of corrosion or may cause explosions, thus, being much more injurious than leakage of Water.	Agreed	
(b)	Carrying of electricity underground cable lines on bridges shall also be discouraged. However, if the electric supply authorities seem to have no other viable alternative and approach the Highway Authority Well in time before the design on the bridge is finalized. They may be permitted to carry the pipe line on independent superstructure, supported on extended portions of piers and abutments in such a manner that in the final arrangement enough free space around the superstructure of the bridge remains available for inspection and repairs etc.	NA	
C)	Cost of required extension of the, substructure as well as that of the supporting shall be borne by the agency-in charge- of the utilities.	Agreed	
(D)	Services are not being allowed indiscriminately on the parapet/any part of the bridges. Safety of the bridges has to be kept in view while permitting various services along bridge. Approvals are to be accorded in this regard with the concurrence of the Ministry's project Chief Engineers	Agreed	
1.18	If crossing of the road involved. If yes, it shall be either encased in pipes OT through structure of conduits specially built for that purpose at the expenses of the agency owning the line.	By HDD	

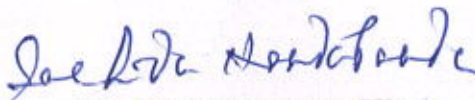
  
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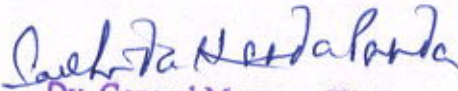
Sl No.	Items	Information/Status	Remarks
(a)	Existing drainage structures shall not be allowed to carry the lines.	Agreed	
(b)	Is it on a line normal to NH		
(c)	Crossing shall not be too near the existing structures on the National Highway, the minimum distance being 15 meter. What is the distance from the existing structures?	Agreed	
(d)	The casing pipe (or conduit pipe in the case of electric cable) carrying the utility line shall be of steel, cast iron, or reinforced cement concrete and have adequate strength and be large enough to permit ready withdrawal of the carrier pipe/cable.	Agreed By HDPE pipe	
(e)	Ends of the casing/conduit pipe shall be sealed from the outside, so that it does not act as a drainage path.	Agreed	
(f)	The casing/conduit pipe should, as minimum extend from drain to drain in cuts and toe of slope in the fills.	Agreed	
(g)	The top of the casing/conduit pipe should be at least 1.2 meter below the surface of the road subject to being at least 0.3 mmt below the drain inverts.	Agreed	
(h)	Crossing shall be by boring method (HDD) specially Where the existing road pavement is of cement concrete or dense bituminous concrete type.	Agreed	
(i)	The casing/conduit pipe shall be installed with an even bearing throughout its length and in such a manner as to prevent the formation of a waterway along it.	Agreed	
2	Document/Drawings enclosed with proposal.	Enclosed	
2.1	Cross section showing the size of trench for open trenching method. (Is it normal size of 1.2m deepX0.3m Wide).	Agreed	

  
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Sl No.	Items	Information/Status	Remarks
(i)	Should not be greater than 60cm. Wider than the outer diameter of the pipe.	Agreed	
(ii)	Located as close to the extreme edge of the right of way as possible but not less than 15 meter from the centre lines of the nearest carriageway	Agreed	
(iii)	Shall not be permitted to run along the National Highways when the road formation is situated in double cutting. Nor shall these be laid over the existing culverts and bridges.	Agreed	
(iv)	These should be so laid that their top is at least 0.6 meter below the ground level so as not to obstruct drainage of the road land.	Agreed	
2.2	Cross section showing the size of the pit and location of cable for HDD method.	Attached	
2.3	Strip plan / Route plan showing electricity overhead line, chainage, width of ROW, distance of proposed pipe line from the edge of ROW, important mile stone, intersections, cross drainage works etc.	Attached	
2.4	Methodology for laying of proposed electricity overhead line.	Attached	
2.4.1	Open trenching method (May be allowed in utility corridor only where pavement is neither cement concrete nor dense bituminous concrete type). If yes, Methodology of refilling of trench.	Agreed	
(a)	The trench width should be at least 30 cm, but not more than 60 cm wider than the outer diameter of the pipe.	Agreed	
(b)	For filling of the trench, bedding shall be to a depth of not less than 30cm. It shall consist of granular material, free of lumps, clods and cobbles and graded to yield a firm surface without sudden change in the bearing value. Unsuitable soil and rock edged should be excavated and replaced by selected material.	Agreed	
©	The backfill shall be completed in two stages (i) side fill to the level of the top of the pipe and (ii) over fill to the bottom of the road crust.	Agreed	
(d)	The side till shall consist of granular material laid in 15cm layers each consolidated by mechanical tampering and controlled addition of moisture to 95% of the Proctor's Density. Over-fill shall be compacted to the same density as the material that had been removed. Consolidation by saturation or ponding will not be permitted.	Agreed	
(e)	The road crust shall be built to the same strength as the existing crust on either side of the trench. Care shall be taken to avoid the formation of a dip at the trench.	Agreed	

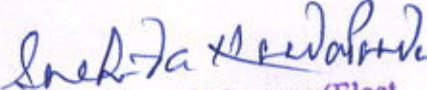
  
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Sl No.	Items	Information/Status	Remarks
(f)	The excavation shall be protected by flagman, signs and barricades and red lights during night hours.	Agreed	
(g)	If required, adiversion shall be constructed at the expenses of agency owning the utility line.	Agreed	
2.4.2	Horizontal Directional Drilling (HDD) Method	Yes	
2.43	Laying of electricity overhead line through CD works and method of laying.	NA	
(a)	On approaches, the electric supply mains/cables shall be carried along a line as close to the edge of the right of way as possible up to distance of 30 m from the bridge and subject to all other stipulations contained in this Ministry's guidelines issued with letter No. NII-III/P/66/76 dated 19.11.1976.	Agreed	
3	Draft License Agreement signed by two Witness	Enclosed	
4	Performance Bank Guarantee in favour of NHAI has to be obtained @ Rs. 50/- per running meter (parallel to NH) and Rs. 1,00,000/- per crossing of NH, for a period of one year initially (extendable if required till satisfactory completion of work) as a security for ensuring / making good the excavated trench for laying the cables/ducts by proper filling and compaction, cleaning debris/loose earth produced due to execution of trenching at least 50m away from the edge of the right of way. No payment shall be payable by the NHAI to the licensee for clearing debris/loose earth.	Agreed	
4.1	Performance BG as per above is to be obtained.	Agreed	
4.2	Confirmation of BG has been obtained as per NHAI guidelines	Agreed	
5	Affidavit/Undertaking from the applicant	Agreed	
5.1	Not to damage to other utility, if damaged then to pay the losses either to NHAI or to the concerned agency.	Agreed or enclosed 5.1 to 5.12	
5.2	Renewal of Bank Guarantee.	Agreed	
5.3	Confirming all standarad condition of NHAI's guidelines.	Yes	
	Shifting of electricity overhead line as and when required by NHAI at their own cost.		
	Shifting due to 6 laning/widening of NH.		
	Indemnity against all damages and claims clause (xxiv).		

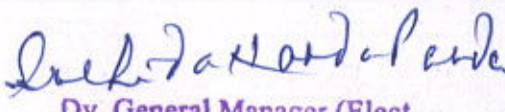
  
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Sl No.	Items	Information/Status	Remarks
5.4	Traffic movement during laying of electricity overheadline to be managed by the applicant.	Yes	
5.5	Prior approval of the NHAI shall be obtained before undertaking any work of installation, shifting or repairs, or alterations to the showing electricity overhead line located in the National Highway right of ways.		
5.6	Expenditure, if any incurred by NHAI for repairing any damage caused to the National Highway by the laying, maintenance or shifting of the electricity overhead line will be borne by the agency owning the line.		
5.7	If the NHAI considers it necessary in future to move the utility line for any work of improvement or repairs to the road, it shall be carried out as desired by the NHAI at the cost of the agency owning the utility line within a reasonable time (not exceeding 60days) of the intimation given.		
5.8	Certificate from the applicant in the following format		
5.9	(i) Laying of electricity overhead line will not have any deleterious effects on any of the bridge components and roadway safety for traffic.		
5.1	For 6-laning " We do undertake that we will relocate service roads/approach road/utilities at our own cost not with standing the permission granted within such time as will be stipulated by NHAI for future six laning or any other development?		
5.11	Who will sign the agreement on behalf of electricity overhead line agency	Mr. Sachidananda Panda Dy. General Manager (EHT) Construction Division, OPTCL	
5.12	Certificate from the Project Director		
6	Certificate for confirming of all standard condition issued vide ministry circular No.		
7	Ministry Circular No. NH-41(58)/68 dated 31.01.1969		
7.1	Ministry Circular No. NH-III/P/66/76 dated 18/19.11.1976		
	Ministry Circular No. RW/NH-III/P/66/76 dated 11.05.1982		
	Ministry Circular No. RW/NH-11037/1/86-DOI (ii) dated 28.07.1993		
	Ministry Circular No. RW/NH-11037/1/86-DOI (ii) dated 19.01.1995		

  
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 MSV International IMC in association with  
 HighBrid Infra India Consultants Pvt. Ltd.

  
 Dy. General Manager (Elect.)  
 E. H. T. Division  
 OPTCL, Bhubaneswar



Sl No.	Items	Information/Status	Remarks
	Ministry Circular No. RW/NH-11037/1/86-DOI (ii) dated 19.01.1995		
	Ministry Circular No. RW/NH-34066/2/95/S&R dated 25.10.1999		
	Ministry Circular No. RW/NH-34066/7/2003 S&R(B) dated 17.09.2003		
7.2	<p>Certificate from PD in the following format (i) "It is certified that any other location of the electricity overhead line would be extremely difficult and unreasonable costly and the installation of electricity overhead line within ROW will not adversely affect the design, stability and traffic safety of the highway nor the likely future improvement such as widening of the carriageway, easing of curve etc."</p> <p>(ii) For 6-laning</p> <p>(a) Where feasible is available "I do certify that there will be no hindrance to proposed Six-laning based on the feasibility report considering proposed structures at the said location."</p> <p>(b) In case feasibility report is not available, "I do certify that sufficient ROW is available at site for accommodating proposed six-laning."</p>		
8	If NH section proposed to be taken up by NHAI on BOT basis-a clause is to be inserted in the agreement. "The permitted Highway on which Licensee has been granted the right to lay cable/duct has also been granted as a right of way to the Concessionaire under the concession agreement for up-gradation of (.....section from Km .....to Km..... of NH No. ....on Build, Operate and Transfer Basis) and therefore, the licensee shall honour the same."		
9	Who will supervise the work of laying of electricity overhead line		
10	Who will ensure that the defects in road portion after laying of electricity overhead line are corrected and if not corrected then what action will be taken.		
11	Who will pay the claims for damages done/disruption in working of Concessionaire if asked by the Concessionaire.		
12	A certificate from PD that he will enter the proposed permission in the register of records of the permissions in the prescribed proforma (copy enclosed).		
13	If any previous approval is accorded for laying of underground electricity overhead line that photocopy of register of records of permissions accorded as maintained by PD then copy be enclosed.		

*[Signature]*  
Team Leader  
MSV International INC in association with  
HighBrid Infra India Consultants Pvt. Ltd.



*[Signature]*  
Dy. General Manager (Plan)  
E. H. T. (C) Dept.  
OPCTL, Bhubaneswar

*[Signature]*  
परियोजना निदेशक/Project Director  
राष्ट्रीय राष्ट्रीय राजमार्ग प्राधिकरण  
National Highways Authority of India  
क.का.उ. भुवनेश्वर/PIU, Bhubaneswar